

IN THE CLAIMS

Please amend the following claims.

1. (currently amended) A process comprising:
forming a metal structure having at least one via and at least one interconnect onto a substrate, said metal structure extending above a surface of said substrate;
forming, subsequent to said forming said a metal structure, a carbon-doped oxide (CDO) layer with a first concentration of carbon dopants therein on said substrate and filling entirely between elements of said metal structure; and
continuing to form, subsequent to said forming said CDO layer with said first concentration of carbon dopants, said CDO layer further above said metal interconnect structure with a second concentration of carbon dopants therein, wherein said first concentration of carbon dopants is higher than said second concentration of carbon dopants to form a hard mask with the second concentration of carbon dopants.

2. (previously presented) The process according to Claim 1 further comprising:
forming, subsequent to said forming said second concentration of carbon dopants, said CDO layer further with a third concentration of carbon dopants therein, wherein there is a linear correlation of said concentration of carbon dopants between said first concentration, said second concentration, and said third concentration.

3. (previously presented) The process according to Claim 1 further comprising:
forming said CDO layer further with a third concentration of carbon dopants therein, wherein said first and third concentrations are higher than said second concentration.

4. (previously presented) The process according to Claim 1 further comprising:
forming said CDO layer further with a third concentration of carbon dopants therein, wherein said first and third concentrations are lower than said second concentration.

5-6. (cancelled)

7. (currently amended) A process comprising:

forming a first layer of carbon-doped oxide (CDO) on a substrate, said first layer of CDO having a first concentration of carbon dopants therein;

forming a second layer of CDO having a second concentration of carbon dopants therein above said first layer of CDO; and

forming a third layer of CDO having a third concentration of carbon dopants therein above said second layer of CDO, wherein said first concentration and said third concentration are higher than said second concentration to reduce electric field fringe effects.

8-9. (cancelled)

10. (currently amended) A process comprising:

forming a first layer of carbon-doped oxide (CDO) on a substrate, said first layer of CDO having a first concentration of carbon dopants therein;

forming a second layer of CDO having a second concentration of carbon dopants therein above said first layer of CDO; and

forming a third layer of CDO having a third concentration of carbon dopants therein above said second layer of CDO, wherein said first concentration and said third concentration are lower than said second concentration to reduce electric field fringe effects.

11-30. (cancelled)